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November 6, 2003

Victoria Rutson, Chief
Office of Economics, Environmental Analysis and Administration
Surface Transportation Board
1925 K Street NW, Room 500
Washington, DC 20423

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Subject: STB Finance Docket 34284, Southwest Gulf Railroad Company...

Dear Ms. Rutson:

As a consulting party in the process involving STB Finance Docket 34284, "A Preliminary Cultural Resources Assessment..." (a report which I personally never received), I am writing to provide your office with my comments and observations on the contents of this report, as it reflects potential cultural resource impacts to the Quihi area and its environs in Medina County, Texas.

My comments are based on almost 40 years of direct involvement in the archaeology of central, south central and southern Texas, and the publication of over 300 papers, monographs and books on the prehistory of this region. I have directed or supervised well over 100 projects in this region since 1967. Furthermore, before I ever heard of the construction plans outlined in STB Finance Docket 34284, I was already conducting personal, unfunded archaeological research in the project area near Quihi, Texas.

I give this background as a prelude to saying that this "preliminary cultural resources assessment" is perhaps the *worst* such document I have ever seen in my decades of work as a professional archaeologist. Indeed, in my 30 years as a professor with The University of Texas, I would have given an "F" grade to it had it been turned in as a paper by a first-semester freshman in an introductory archaeology course! All of this means that a vast amount of historical, archaeological, and geoarchaeological studies must be done in the project zone prior to any permitting of such activity. These views are shared by the Texas Historical Commission and in consultations I have already had with the Advisory Council on Historic Preservation.

However, my main purpose in writing this letter is to provide specific comments on the cultural resources, known and expected, in the project zone. Some of these could have

been predicted had any *minimal*, scholarly endeavor been attempted in the preparation of STB 34284.

1. The issue of prehistoric archaeology

This matter receives the poorest coverage in the subject document. Indeed, there are statements made in the document, e.g., page 10, paragraph 2, which are wholly in error, and unfortunately, laughable. The following pages on **Prehistory** (11, 12) show no indication of important archaeological studies that have gone on within a 20-mile radius of Quihi, some of which are in the same environmental contexts. My comments will be two-fold: (a) background the archaeology of the area and (b) my personal knowledge of the area's archaeology.

(a) *Background to the archaeology of the area.* The most basic scholarly research on the archaeology of this area would have revealed:

1. **41ME34:** A site that I excavated in 1987, lying about 12 mi to the W/SW in the exact type of stream drainage found in the Quihi area. This site had one area, adjacent to a small creek, that was deeply buried and stratified culturally, going back to 5500 years ago. Nearby was an isolated component of the Late Prehistoric Toyah Phase, identical to what will likely be found in the various small creeks that drain into, as well as along, Quihi Creek (MA thesis by Russell Brownlow, University of Houston, Department of Anthropology, 1998). Sites like ME34 should be anticipated in all the drainage systems involving Quihi Creek. This is an issue to which I will return later in this letter.
2. **41ME29.** This is a major archaeological site west of Highway 16 on the Bexar-Medina county border – roughly 20 miles E/NE of your project area. This site, known as “Jonas Terrace” is in the edge of the Balcones escarpment and would be relevant only to the quarry area/northernmost part of the proposed railroad. What is important about this report, by LeRoy Johnson (1995; Office of the State Archeol., #40, Austin) is its comprehensive treatment of the region, its wealth of data on ancient material culture, and its overall importance in planning strategies for future archaeological survey and analysis in the Quihi area.
3. **41UV2.** Located about 30 miles due west of the project area, and at about the distance north of Hwy 90 as Quihi, is one of the most significant archaeological sites in Texas. It contains cultural materials spanning the time frame from Clovis (11,200 years ago) up to the Late Prehistoric. Most important are the Clovis and Folsom (10,800 years) ago finds at Kincaid Rockshelter, excavated in the late 1940s and early 1950s (numerous publications by M. B. Collins, UT-Austin). While there are likely no limestone outcrops in the Quihi area, of the type in which 41UV2 is located, the site is within the same general environmental context, and this clearly indicates that Clovis and Folsom materials can be

expected in the Quihi area. Indeed, they already have been, as I will point out below..

4. **Scorpion Cave (41ME8).** This is a small rockshelter on the Medina River roughly 8-10 miles E of the project area. While the kinds of geologic outcrops in which Scorpion Cave occurs are unlikely in the project area, the site contains archaeological materials which will be important to the analysis and understanding of Quihi area cultural resources. A definitive publication by Highley, et al. is found in the 1978 *Bulletin of the Texas Archeological Society*.
5. **41ME30.** This is a “sinkhole” burial cave found 20 miles due west of the proposed quarry related to the railroad. Indeed, it is within the same geological/topographic/environmental context as the quarry area. Several Native American burials were found, dating roughly to the Late Archaic, in the late centuries B.C. Sinkhole burial caves are common in Medina, Uvalde, and other southcentral Texas locales, both on the Plateau and just south of the escarpment. During my personal research in the Quihi area, an individual told me of a large sinkhole either at or very near the proposed Vulcan Materials quarry. I hasten to add that I have no first-hand knowledge of this. However, if it or other sinkholes are in that area, and in the northern reaches of the railroad they must be fully investigated. (see Bement book published by UT Press).
6. **41ME53 and the Quinta Medina Project.** In the early 1990s, the Institute of Texan Cultures and the Southern Texas Archaeological Association carried out two field schools at the Quinta Medina site and environs, just a couple of miles southeast of Quihi on the Quihi-Castroville Road. Excavations at site 41ME53 provided evidence of occupation for more than 5000-6000 years. Archaeological surveys in the area revealed other sites. This area is in an environmental context identical to the Quihi/railroad project area and has to be considered in terms of further research and analysis. Publications are to be found in *La Tierra* Vol. 19, #2, 1992, pp. 14-28, and Vol. 20, #1, 1993, pp. 12-26, both papers authored by Thomas Guderjan et al.

An overview of the archaeology of the zone within which this STB subject report is based can be found in Hester, T. R., “Early Human Populations Along the Balcones Escarpment,” in *The Balcones Escarpment*, P. Abbott and C. M. Woodruff, Jr., eds., Geological Society of America, 1986, pp. 55-62. Some of the sites noted above are mentioned in that synthesis, although the paper is now dated and some of the other sites have been studied or published since it was prepared.

(b) Personal scientific research in the prehistory of the area

Over the past year or so, I have been a personal study of archaeological collections and sites on the Mangold Ranch near Quihi. My interest in these lies in the fact – which further subject project studies must area—that this area is largely unknown in terms of Texas prehistory.

One of the sites, **41ME132** [official State of Texas site number], the Gap Site, is directly beneath or at least closely adjacent to Alternative 3 of the proposed railroad route southeast of Quihi. This site has just been barely studied. However, a test pit dug by the late Buddy Mangold, found a zone of Frio points just below the surface. Further exploration could (1) expand our knowledge of the Late (Transistional) Archaic by better defining this Frio-age campsite or (2) could find earlier, stratified deposit below Frio. This site is on a terrace of Quihi creek, and while no geoarchaeological studies have yet been done at the site, it appears that Quihi creek has shifted its channel repeatedly in this zone (cf. 41ME34). This site alone points out the errors of the statements re: site occurrence found in the subject report.

However, it is site **41ME133** (the Buddy Mangold site) that points out the incredible deficiencies in the treatment of prehistory in the subject report. This site was partially excavated by the late Buddy Mangold in the 1990s. Much of the site remains intact. The artifacts from the site are incredibly extensive, as I am sure will be the case at many sites yet to be found in the Quihi area.

Although my analysis of the collection is far from complete, I have already identified a Folsom end-scraper (10,800 years ago), and even more importantly, a substantial number of Wilson points. The stemmed Wilson type is a poorly known, but well-dated, Paleoindian time marker in the 10,500 year old time frame. The key site for this type is Wilson-Leonard near Austin, published by Michael B. Collins in a 5-volume report in 1998. Collins tells me that aside from the Wilson-Leonard site, the Buddy Mangold site contains more of these points than any other site in Texas. There are also Plainview, Golondrina, and Angostura points at the site (10,200-8,800 years ago).

Moreover, the Archaic and Late Prehistoric artifacts are in great abundance, representing the broad time frame from 8,000 years ago up to about the time of Spanish contact. Indeed, there are some points that appear to be of the Guerrero type, associated with Indians of the Spanish Mission period in the 18th century. There is also a piece of obsidian—volcanic glass that does not occur in Texas. I have led the study of Texas obsidians since 1970, working with nuclear chemists at the Lawrence Berkeley National Laboratory in Berkeley, CA. Obsidian is very rare in this part of the state, yet our precise geochemical sourcing places some of it as coming from geologic outcrops as far away as southern Idaho (the Malad source) and from sources in northern New Mexico (several sources in the Jemez mountains). We have not yet had this obsidian fragment sourced, but it is reflective of the widespread trade networks that ran along the margin of the Edwards Plateau, and is part of a pattern that extends westward into Uvalde County.

As best as I can tell with limited data, 41ME133 lies outside (perhaps 1.5 mi E) of any of the proposed railroad routes. However, its importance goes farther than immediate impact. It is reflective of the long time depth of Native American prehistory to be expected along Quihi creek and any of its (now) small drainages. It is reflective of intensive prehistoric populations, of trade contacts, and of continuity into the Spanish Colonial period. These sorts of patterns should be expected at other Quihi/project area sites, as ancient “hunters and gatherers” were highly mobile and didn’t just occupy single sites like 41ME133!

2. Implications for Surveys and Excavations Related to the Subject Project

While archaeologists know very little about the archaeology of the project area (that in itself is cause for intensive investigation), what we do know provides hard evidence that it lies in an area of extreme archaeological significance. It is surrounded by important sites, many of which I have listed and some of which are in similar if not identical environmental contexts. We know from 41ME132 and 41ME133, in the midst of the project area, that extensive prehistoric remains are predictable, and will likely extend back almost 11,000 years at some sites. However, the whole chronological range of human prehistory in the area is likely to be found in various forms at any number of sites (e.g., 41ME34, and even closer, 41ME53). Because of the nature of the formation processes in the local geology, any archaeological survey that is worth its salt will have to employ an experienced geoarchaeologist or geomorphologist to identify likely site areas, changes that are more recent in time, etc., and there will be a pressing need for an extensive program of backhoe trenching to reconstruct the Holocene geology and to develop a model of site location. It can be predicted that any number of sites will lie in the path of the subject railroad or its alternatives. In order for NEPA, Sec. 106, or any number of other permitting processes to go forward, hundreds of thousands of dollars will have to be spent on archaeological survey and geomorphology. The mitigation of only two or three sites would likely cost into the millions of dollars based on modern archaeological standards at the Federal and State level.

3. Implications for Historic Archaeology

While STB Finance Docket 34248 report on cultural resources does a more useful job of treating the numerous historic sites in the project area, it falls far short of what is to be expected, the significance of these sites, and the great amount of work (and money) that will go into their investigation. The stone (and other structures) of 1850s Quihi represent one of the most remarkable, surviving constellations of early architecture in southcentral Texas. In my own experience, it is unique. To date, the Quihi and New Fountain Historical Society has already filed with the Texas Historical Commission more than 30 **Endangered Historic Property Identification Forms** as part of the THC’s new HELP program. These forms contain details on the structures, their ages, and are accompanied by photographs. However, there are at least 60 known structures of this vintage. Many of these are in the path or will be impacted by any of the 3 alternative subject railroad routes. This means that formal site assessments will have to be done -- the use of

professional preservation architects, measured drawings, high quality photographic documentation, oral histories, and archaeological investigations all being part of such studies

This is a highly time consuming and very expensive endeavor, but these sites are part of the history of the development of Texas and cannot be given short shrift. Neither can they, or their archaeological deposits, be “preserved” by having them “moved” to a “protected” location! There are stories, not yet confirmed by me, of a special cemetery set aside for Native American remnant populations in the area. This will require extensive Native American consultation, probably with the Mescalero Apache (who represent the Lipan Apache on a Federal level), the Kickapoo, and the Lipan Apache Tribe of Texas, a very active (or activist) group in San Antonio.

It is also apparent that the preliminary cultural resource assessment did not identify a property registered in the Texas Family Land Heritage Program, slated to have the main route or an alternate rail route go right through the middle of it. This program has been around since the 1970s, and is a favorite of the State government, particularly the Secretary of Agriculture. This will be a highly sensitive issue, to say the very least, and should the routes continue to be slated for the property, a great deal of very expensive historical archaeology will have to be carried out.

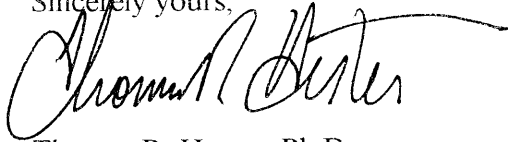
4. Closing Observations

It is likely that no worse area in south central Texas could have been chosen for a quarry and railroad facilities than the Quihi region. This is one of the richest areas for studying the historical development of Texas, and is incredibly important in terms of the preservation in place of many of the buildings and related aspects of this historical record. In addition, this is an area where no substantial archaeological work had ever been done before, but which even the most minimal research has demonstrated the high probability for the discovery of numerous, and important, archaeological sites. These will have to be fully assessed and perhaps in some cases, fully excavated (mitigated). This issue has already been brought to the attention of the Texas Historical Commission and the Advisory Council on Historic Preservation. The subject applicant should have funded historical and archaeological research well prior to land purchases and planning if the applicant hoped to avoid the destruction of important pieces of Texas history and prehistory – which can now be done only at a very high cost in time and money. This is an issue that we as professional archaeologists, the Texas Historical Commission, and other agencies have been trying to make clear to developers at all levels for decades.

Now, we are left facing a potential disaster in terms of the historical and archaeological record. It is therefore incumbent on the STB to require extensive and well planned historical and archaeological studies in the area prior to permitting any rail construction. If the STB does not follow its mandate, there are other Federal and State regulatory agencies waiting in the wings to make sure that this process is done properly.

Thank you for the opportunity to provide these data and these comments.

Sincerely yours,

A handwritten signature in black ink, appearing to read 'Thomas R. Hester', with a long, sweeping horizontal line extending from the end of the name.

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